

GP-304476

LARGE-BORE, MEDIUM-SPEED DIESEL ENGINE HAVING
PISTON CROWN BOWL WITH ACUTE RE-ENTRANT ANGLE

ABSTRACT OF THE DISCLOSURE

A large-bore (at least 180 mm diameter) diesel engine cylinder configuration featuring a piston crown bowl having an acute re-entrant angle and, optionally, an anti-polish ring. The acute re-entrant angle crown bowl
5 involves a maximum radius of the crown bowl exceeding a minimum crown bowl radius, wherein the maximum crown bowl radius is located farther from the squish face than is the minimum crown bowl radius. The acute re-entrant angle crown bowl applied to large-bore, medium-speed diesel engines yields an improvement in performance and emissions characteristics.
10 The anti-polish ring may be integrally formed with the cylinder liner and used in any internal combustion engine.